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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/613,331	07/07/2000	MASAMOTO TAGO	WN-2205	9072

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EXAMINER

HOANG, QUOC DINH

ART UNIT PAPER NUMBER

2818

DATE MAILED: 02/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s)

09/613,331

Applicant(s)

TAGO ET AL.

Examiner

Quoc D Hoang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6,7 and 9-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7 and 9-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Amendment filed on 11/27/2002 has been entered and made of record as Paper No. 11

In Amendment, claim 24 is newly added. Claims 1, 2, 6, 7, and 9-24 are remained for examination in Paper No. 11 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 6, 7, and 9-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saitou et al., (U.S. Pat 5,162,240) and in view of Watanabe et al., (U.S. Pat 6,278,148).

Regarding claims 12-17, and 19, Saitou et al., Figures. 1- 13, and related text on col. 1-20 which discloses a method of manufacturing a system semiconductor device comprising: forming a system LSI cell portion 30 which includes a plurality of functional blocks (col. 16, lines 1-55 and col.20, lines 50-51 and Fig. 13); forming a global wiring layer 20 by forming a wiring layer on a semiconductor substrate (col. 15, lines 38-67 and col. 16, lines 1-50 and Figs. 12-13); laminating the system LSI cell portion 30 with the global wiring layer 20 such that the functional blocks are electrically connected to each other (col. 15, lines 38-67 and col. 16, lines 1-50 and Figs. 12- 13) wherein the

global wiring layer 20 is formed by sequentially laminating a first wiring layer 16X, a second wiring layer 16Y, an insulating layer 161, and inner bumps 23 on a semiconductor substrate 10 (col. 15, lines 3)8-67 and col. 16, lines 1 50 and Figs. 12-13).

Saitou et al., do not clearly disclose each of the functional blocks comprising a plurality of gate.

Watanabe et al., teach on column 1-10, forming a semiconductor chip includes a plurality of functional blocks, wherein each of the functional blocks comprising a plurality of gates (see col. 6, lines 59-67 and col. 7, lines 1-18 and Fig. 6).

Saitou et al., and Watanabe et al., are combinable because they are from the same filed of endeavor. At the time of the invention it would have been obvious to a person of ordinary skill in the art to have the functional blocks comprising a plurality of gates. The motivation for doing so is to connect the gates in each of the functional blocks by using a global wiring layer in order to reduce noises and increase the chip area. Therefore, it would have been obvious to combines Saitou et al., and Watanabe et al., to obtain the invention of claims 12-17, and 19.

Regarding claims 18 and 20, Saitou et al., discloses forming a via for electrically connects the first wiring layer 16X with the second wiring layer 16Y in the insulting layer 161 16Y (Fig. 12).

Regarding claims 21 and 22, Saitou et al., discloses forming at least one or more of the wiring layers in the global wiring layer 20 (Figure. 13).

Device claims 1, 2, 6, 7, 9-11, 23 and 24 are rejected as same reasons as above rejected claims 12-21

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quoc Hoang whose telephone number is (703) 306-5795. The examiner can normally be reached on Monday-Friday from 8.00 AM to 5.00 PM.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (703) 308-4910. The fax phone numbers of

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the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


Quoc Hoang
Patent examiner/AU 2818.


David Nelms
Supervisory Patent Examiner
Technology Center 2800